APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,362	04/30/2001	Dennis Frank Haynes	RSW920010084US1	3164

7590 07/26/2004	**EXAMINER**
IBM CORPORATION	GARG, YOGESH C
INTELLECTUAL PROPERTY LAW	

DEPT. IQOA/BLDG. 040-3	ART UNIT PAPER NUMBER
1701 NORTH STREET	3625
ENDICOTT,, NY 13760	

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/845,362	HAYNES ET AL.
	Examiner	Art Unit	
	Yogesh C Garg	3625	MG

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _07 June 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

    4a) Of the above claim(s) _5-12_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _10/17/2001_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Applicant's election without traverse of claims 1-4 in the reply filed on June 7, 2004is acknowledged. Claims 5-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 7, 2004.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

2.1. Claimed Invention(s) does not fall within the Technological Art.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts".

See In re Musgrave, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See Diamond v. Diehr, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See State Street Bank & Trust Co. v. Signature Financial Group, Inc. 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See In re Toma, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In Toma, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under °101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of this analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, **State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).**

In the present application, Claims 14 recite steps of determining if a shopper changes an attribute of a primary item, identifying a secondary item linked to primary item, changing a corresponding attribute of the secondary item, soliciting authorization from the shopper to change the attribute of the secondary item, etc. but do not recite the use of any technology in executing these manipulative steps and realizing the results from the manipulative steps. These steps are similar to the method wherein a traveler going on vacation has already bought a vacation package consisting of flights, hotel booking, and other temporal reservations such as cruise, shows, etc and then subsequently wants to change his date of flight and in doing so will also be changing the attributes of the other travel components like hotel booking, shows booking, etc for the obvious reason of synchronizing the secondary components with the primary component. This whole process is done manually without using any technology. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts, such as incorporating/integrating a computer/software/hardware computer network or electronic network functionally with manipulative steps recited in the claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (US Patent 6,167,383).

Regarding claim 1, Henson teaches a method for managing a shopping cart (see at least col.1, lines 53-66, " *Referring now to FIG.1, the present implementation of an online store 10 for use in generating customer configured machines.......The commerce application 14 includes a configurator 18, shopping cart 20,...* ", and col.9, lines 26-29, " *In accordance with another aspect of the online store, the shopping cart is customized with merchandising options. The cart takes on merchandising options similar to what the configurator is doing.* " , comprising the acts of:

determining whether a shopping command of a shopper changes an attribute of a primary item in a shopping cart, when the shopping command changes an attribute of a primary item, identifying a secondary item in the

shopping cart linked to the primary item, and changing a corresponding attribute of the secondary item in response to the change in the attribute of the primary item (see at least col.7, line 57-col.9, line 8), " *The on-line store further includes validation of a configuration built by a customer. Validation (or compatibility) provides the customer with a validation message indicating an occurrence of when the options selected for a particular system are not correct. If the options selected for a particular system will adversely affect the shipment of the configured system, then a warning message is issued to enable the user to modify options accordingly.........* ". Note: Henson, in this segment, discloses the functioning of the Validation module 34[FIGF.1]. The validation module is able to determine if the particular system [corresponds to the primary item as claimed in the application] and the options [correspond to secondary items as claimed in the applications] chosen for the system are inconsistent and if it is so determined the inconsistency is removed by modifying the options. Henson does not explicitly suggest that the attributes of the secondary item are changed in response to determining a change in the primary item. However, this limitation of determining a change in the primary item and then subsequently changing the attributes of the secondary item is implied from the characteristics of the Henson's validation module, which detects the incompatibility between the particular system and its chosen options at any time. Therefore, it would be obvious to a skilled artisan in the art to utilize Henson's validation module to determine a change in the design/configuration/attribute of the primary item [particular system in Henson] and then alert the user about the incompatibility of the changed primary item with those of the secondary items [chosen options in Henson] as they would be incompatible, as explicitly disclosed in Henson.

Regarding claim 2, all the limitations are already covered in claim 1 above except for soliciting authorization of the shopper to change a corresponding attribute of the secondary item in response to the change in the attribute of the primary item; and changing the corresponding attribute of the secondary item in accord with authorization of the shopper. Henson also discloses this limitation (see at leas col.8, lines 7- 55, "....... *The system option compatibility warning includes an icon, for example, in the form of a green check mark as shown in FIGS. 3 and 4. The system option compatibility warning icon is presented to the online shopper when a system option identified as having an incompatibility with another system option is recognized as a customer selection. .... Customers of the on-line store application thus receive advance warning when an option will not work for a given configuration. The customer can then modify, change, and/or delete the particular option which gave rise to the validation warning. "*.).

Regarding claims 3-4, Henson further teaches that the authorization is explicit (see at least col.8, line 62-col.9, line 8, " .... Active validation is the active cross-checking of the options of a configuration and indicating the occurrence of a problem when the problem is detected. That is, upon the detection of the specific options within the same configuration, a warning can be provided to the customer. Alternatively, upon the selection of a first option, wherein the first option cannot exist with a second option within the same configuration, selection of the second option can be disabled. .... ". Note: Active validation corresponds to the explicit authorization.) and implicit (see at least col.8, lines 56-62, " ..... *Passive validation relates to the validation module knowing that specific options don't work together, and providing a validation message that specific options should not be included in the same configuration. "*. Note: Passive validation corresponds to the implicit authorization.).

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(i)   US Patent 6,658,093 to Langseth et al. discloses a real time interactive travel availability information such as travel components are synchronized with the travel parameters indicated by the user (see at least col.8, lines 1-65).

(ii)   US Publication Number: 2002/0052806 to Hodson et al. discloses an integrated electronic shopping cart system and method (see at least abstract).

(iii)   WO 98/21679 to Microsoft Corp. discloses the use of an electronic shopping basket, which accesses and manipulates product and merchant information stored on the medium.
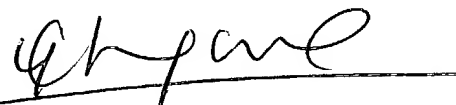
(IV)   Newing, Rod; " Secure Internet transactions at last|"; Management Accounting; London; Mar 1997, Vol: 75; Iss:3; pg.44, 2 pgs, extracted on Internet from Proquest database on 7/22/2004 disclose use of shopping cart on Internet to hold, add and delete items.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh C Garg whose telephone number is 703-306-0252. The examiner can normally be reached on M-F(8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A Millin can be reached on 703-308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

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more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Yogesh C Garg
Primary Examiner
Art Unit 3625

YCG
July 20, 2004